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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/073,318

02/13/2002

Nicolas Voyer

219484US2

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08/12/2004

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EXAMINER

AFSHAR, KAMRAN

ART UNIT

PAPER NUMBER

2681

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,318

Applicant(s)

VOYER, NICOLAS

Examiner

Kamran Afshar, 703-305-7373

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 5-9 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 4. See MPEP § 608.01(n). Accordingly, the claims 5-9 have not been further treated on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsumura (EP 0,964, 595 A1).

With respect to claim 1, Tsumura discloses an allocation (See e.g. assigning, Title, Abstract) method for allocating transmission resources (See e.g. assigning frequency / frequency channel or slot) to a plurality of communications between a base station and a plurality of mobile terminals (See e.g. 10, 20-21 of Fig. 4, Co. 5, Lines 28-38), characterised in that, for a communication with a given mobile terminal (See e.g. step 101, values 1, value 2, propagation loss in channel between the base station and the mobile stations, transmission power level, Co. 5, Line 39 – Co. 6, Line 16), it selects a resource allocation criterion from amongst a plurality of predetermined allocation criteria (See e.g. non-adjacent channel, adjacent channel, 101-107 of Fig. 5), the selection of the criterion being made using a quantity characteristic (See e.g. plurality of group A1, group A2) of the propagation losses between the mobile terminal and the base station (See e.g. Co. 6, Lines 20-46).

Regarding claim 2, Tsumura discloses in that the characteristic quantity is a function of the distance between the mobile terminal and the base station (see e.g. Co. 6, Line 47– Co. 7, Line 18, Fig. 7).

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsumura (EP 0,964, 595) in view of Halford (U.S. Patent 6,411,612 B1).

With respect to claims 3-4, Tsumura discloses everything in claim 1. However, Tsumura does not explicitly teach the quantity is a function of the coefficient of coupling between the antenna of the mobile terminal and the antenna of the base station and the resources comprise transmission codes and time slots, a set of codes being associated with each slot. In the same field of endeavor, Halford teaches the quantity is a function of the coefficient of coupling between the antenna (See e.g. Co. 6, Lines 11-25, Fig. 5) of the mobile terminal (See e.g. 11-1-71-3, & BS of Fig. 13) and the antenna of the base station and the resources comprise transmission codes (See e.g. PN codes, Co. 7, Lines 45-50) and time slots, a set of codes being associated with each slot (See e.g. 26-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide above teaching of Halford to Tsumura to properly adjust the antenna weights, knowledge of which co-channel users may be transmitting at any instant in time is required; and information is derived by monitoring transmissions from co-channel users in adjacent cells and correlating with synchronization patterns of these monitored transmissions to determine relative offsets between their assigned time slots and the time slot of a desired user as suggested by Halford (See e.g. Co. 10, Lines 1-8).

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kamran Afshar whose telephone number is (703) 305-7373. The examiner can be reached on Monday-Friday.

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If attempts to reach the examiner by the telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached @ (703) 308-4825. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.


Kamran Afshar


**DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
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